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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/448,578	11/23/1999	NICK J. HUIGE	661005.90012	5200

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EXAMINER

SHERMER, CURTIS EDWARD

ART UNIT

PAPER NUMBER

1761

18

DATE MAILED: 05/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

TC-18

<b>Office Action Summary</b>	Application No. <b>09/448,578</b>	Applicant(s) <b>Huige et al.</b>
	Examiner <b>Curtis E. Sherrer</b>	Art Unit <b>1761</b>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Feb 12, 2002

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1-8, 10, and 11 is/are pending in the application.

4a)  Of the above, claim(s) 7 and 8 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-6, 10, and 11 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some\* c) None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892)      18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_      20)  Other: \_\_\_\_\_

**Part III DETAILED ACTION**

***Drawings***

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 is indefinite because it recites that the yeast slurry is oxygenated "prior to pitching the yeast in a subsequent fermentation" and it is not clear if the addition of yeast to a fermentation is a positive limitation, i.e., is a step in the process of "a method of oxygenating yeast slurry." If it is, then it is considered that claim 3 does not further define claim 1.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coutts (U.S. Pat. No. 6,149,949) in view of Ripka (U.S. Pat. No. 4,764,471) and in further view of applicants' admissions (pages 1, and 6-8) .

7. Coutts and Ripka teach that previously cited. They do not teach how that the yeast slurry is provided from a previous fermentation that has been anaerobic. Applicants admit that “[c]ommonly, wort is inoculated or ‘pitched’ with yeast harvested from a previous fermentation. Generally pitching yeast has experienced anaerobic conditions during fermentation.” Applicants then discuss the prior art method of aerated the yeast by aerating the wort. It would have been obvious to those of ordinary skill in the art to use harvested yeast from a previous anaerobic fermentation because applicants admit that this is commonly performed in the brewing industry.

Applicants state, with respect to the  $k_L a$  value, that the “mass transfer efficiency is usually expressed by the factor  $k_L a$  in which  $k_L$  is the mass transfer coefficient (cm/min) and  $a$  is the interfacial area between gas and liquid divided by the liquid volume in  $\text{cm}^{-1}$ .” (Page 6, middle). They also stated that “[h]igh  $k_L a$  values can be achieved by renewing the liquid surface continuously through the application of high cross flow velocity.” (Pages 7-8). Also, “[o]ne of ordinary skill in the art will appreciate that one may vary these parameters and still achieve acceptable oxygenation, provided that the  $k_L a$  value is high.” (Page 8, middle). From these

statements one of ordinary skill would optimize this result effective variable as taught by applicants.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1-6, 10 and 11 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. No claim is allowed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis Sherrer whose telephone number is (703) 308-3847. The examiner can normally be reached on Tuesday through Friday from 6:30 to 4:30. The **fax phone number** for this Group is (703)-305-3602.

11. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

  
Curtis E. Sherrer  
Primary Examiner  
April 30, 2002